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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,392	04/13/2004	Junji Minato	9333/376	3379

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EXAMINER

WEISKOPF, MARIE

ART UNIT PAPER NUMBER

3661

DATE MAILED: 05/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/823,392

Applicant(s)

MINATO ET AL.

Examiner

Marie A. Weiskopf

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/13/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims rejected under 35 U.S.C. 103(a) as being unpatentable over Heron (US 6,055,478) and Ottesen et al (US 6,067,203). Heron discloses an integrated vehicle navigation, communications and entertainment system. Ottesen et al discloses a disk drive having optimized spindle speed for environment.

- In regard to claim 1 and 15, Heron discloses a navigation apparatus having a function of searching for a route to a destination (Column 6, lines 7-30) comprising:

- A memory section for storing map data (Column 3, lines 56-63)
- A position detector for detecting positional information of a vehicle (Column 4, line 66 – Column 5, line 7)
- A display controller for displaying a map generated from the map data read from the memory on a display device. (Column 5, lines 8-14)

Heron, however, does fail to disclose a first memory section for storing map data, a second memory section capable of storing part of the map data stored within the first memory section and a memory controller for causing the map data stored in the first memory section to be stored in the second memory section

when the vehicle reaches a predetermined altitude based upon the positional information. Ottesen et al discloses an improved storage device, in which the environment in which the storage device is being operated is used to control the operation of the storage device. (Column 4, lines 25-38) Ottesen et al discusses having two memory sections, with the second memory section being capable of storing part of the data stored in the first memory section when the vehicle reaches a predetermined altitude. (Column 7, lines 5-12; Column 8, lines 44-65) Ottesen et al mentions having an atmospheric pressure sensor or having the user enter directly the altitude at which the disk drive is being operated. (Column 6, lines 10-13, lines 30-33) It would have been obvious to one having ordinary skill in the art at the time of the invention to include the improved storage device taught by Ottesen et al with any type of navigation system in order to be able to provide complete navigation to the user no matter what type of environment they are located in.

- In regard to claim 2, Ottesen et al discloses using an atmospheric pressure sensor to determine the altitude of the disk drive (Column 6, lines 10-13). Also, it is well known that GPS Satellites are able to provide the altitude information along with the longitude and latitude.
- In regard to claim 3, Heron discloses a GPS receiver which is well known in the art to be able to receive altitude information from and would be obvious to use in order to determine how high the vehicle is traveling. (Column 4, line 66 – Column 5, line 7)

- In regard to claim 4, Ottesen et al discloses having multiple memory sections for different data depending on the altitude and environmental areas the disk drive will be working in. It would have been obvious to one having ordinary skill in the art at the time of the invention to move the map data needed for high altitude over to the second memory section in order to be able to still provide that data safely when in the high altitude areas.
- In regard to claims 5 and 17, Ottesen et al discloses the first memory section including a hard disk drive (Column 4, lines 24-37)
- In regard to claims 6 and 19, neither Ottesen et al or Heron disclose a specific altitude for when the information should be moved over into the second memory section, however, Ottesen et al does disclose that it does need to be moved at high elevations and it would be obvious to use the elevation that is known to start having problems with the disk drive.
- In regard to claim 7, Heron disclose the map data being stored in the memory including route data from which a guidance route to the destination can be obtained by performing a route search and it'd be obvious to move the necessary data over to the second memory when at a high elevation. (Column 6, lines 7-30)
- In regard to claim 8, Heron discloses a navigation apparatus having a function of searching for a route to a destination (Column 6, lines 7-30) comprising:
  - A memory section for storing map data (Column 3, lines 56-63)

- A display controller for displaying a map generated from the map data read from the memory on a display device. (Column 5, lines 8-14)

Heron, however, does fail to disclose a pressure measuring section for measuring atmospheric pressure at the location of a vehicle, a first memory section for storing map data, a second memory section capable of storing part of the map data stored within the first memory section and a memory controller for causing the map data stored in the first memory section to be stored in the second memory section when the vehicle reaches a predetermined altitude based upon the positional information. Ottesen et al discloses an improved storage device, in which the environment in which the storage device is being operated is used to control the operation of the storage device. (Column 4, lines 25-38) Ottesen et al discusses having two memory sections, with the second memory section being capable of storing part of the data stored in the first memory section when the vehicle reaches a predetermined altitude. (Column 7, lines 5-12; Column 8, lines 44-65) Ottesen et al mentions having an atmospheric pressure sensor or having the user enter directly the altitude at which the disk drive is being operated. (Column 6, lines 10-13, lines 30-33) It would have been obvious to one having ordinary skill in the art at the time of the invention to include the improved storage device taught by Ottesen et al with any type of navigation system in order to be able to provide complete navigation to the user no matter what type of environment they are located in.

- In regard to claim 9, neither Ottesen et al or Heron disclose a specific atmospheric pressure for when the information should be moved over into the second memory section, however, Ottesen et al does disclose that it does need to be moved at high elevations and it would be obvious to use the elevation that is known to start having problems with the disk drive.
- In regard to claim 10, Ottesen et al discloses the first memory section including a hard disk drive (Column 4, lines 24-37)

3. Claims 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ottesen et al (US 6,067,203) as applied to claim 15 above, and further in view of Codilian et al (US 6,892,249). Heron and Ottesen et al are discussed above and Codilian et al discloses dependently adjusting at least three operating levels of a disk drive by dependently adjusting a plurality of disk drive parameters.

- In regard to claim 16, Heron and Ottesen et al fail to disclose measuring, when the vehicle subsequently returns to or goes below the predetermined altitude, an interval during which it has been positioned above the predetermined altitude. Codilian et al discloses working with fluctuations in altitude, therefore, there would be an interval of time that the disk drive would wait before switching over to working back in a low altitude environment.
- In regard to claim 18, Heron and Ottesen et al fail to disclose the second memory being a semiconductor memory. Codilian et al does disclose a semiconductor memory which is very well known in the art and would have been obvious to one having ordinary skill in the art at the time of the invention to use the

semiconductor memory since the disk drive must work differently at different altitudes and environmental conditions.

4. Claims 11-13 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heron (US 6,055,478) and Codilian et al (US 6,892,249). Heron is discussed above and Codilian et al discloses dependently adjusting at least three operating levels of a disk drive by dependently adjusting a plurality of disk drive parameters.

- In regard to claim 11, Heron as discussed above has a map storage device and is capable with the GPS of receiving the altitude data of the vehicle. Also, as discussed before, Heron discloses a display controller for displaying a map generated from the map data read by the access section on a display device. (Column 5, lines 8-14) Heron, however, does fail to disclose having a first memory device for storing map data and a second memory device for storing map data of areas located at or above a predetermined altitude. Heron discloses accessing the map data, but not specifically an access section for accessing the first memory device or the second memory device based upon a result measure by the altitude measuring section to read the map data from the first or second memory device. Codilian et al discloses a disk drive which may comprise an environmental sensor for altitude fluctuations. (Column 4, lines 55-59) Codilian et al also discloses a first memory device for storing data and a second memory device for storing data at a predetermined time. (Column 5, lines 23-32) It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the disk drive taught by Codilian with the entertainment and



navigation system taught by Heron because as is well known cars travel at all different altitudes and Codilian discusses the need to operate in different ways at different environmental parameters.

- In regard to claim 12, Codilian et al discloses the first memory device being a hard disk drive and wherein the access section access the second memory device when the vehicle reaches the predetermined altitude. (Column 3, line 60 – Column 4, line 3; Column 4, lines 34-59; Column 5, lines 20-55)
- In regard to claims 13, 14 and 20, Heron discloses a navigation apparatus having a function of searching for a route to a destination (Column 6, lines 7-30) comprising:
  - A magnetic storage medium for storing music data and map data (Column 3, lines 56-63)
  - A position detector for detecting positional information of a vehicle (Column 4, line 66 – Column 5, line 7)
  - An audio output device for playing music generated from the music data read from the memory device by sound. (Column 3, lines 49-67)
  - A display controller for displaying a map generated from the map data read from the memory on a display device. (Column 5, lines 8-14)

Heron fails to disclose a second memory device capable of storing the music data and the map data stored in the magnetic storage medium and a memory controller for causing the music data and the map data stored within the magnetic storage medium to be stored within the memory device when the

Art Unit: 3661

vehicle reaches a predetermine altitude based upon the positional information.

Codilian et al discloses a disk drive which may comprise an environmental sensor for altitude fluctuations. (Column 4, lines 55-59) Codilian et al also discloses a first memory device for storing data and a second memory device for storing data at a predetermined time. (Column 5, lines 23-32) It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the disk drive taught by Codilian with the entertainment and navigation system taught by Heron because as is well known cars travel at all different altitudes and Codilian discusses the need to operate in different ways at different environmental parameters.

### ***Conclusion***

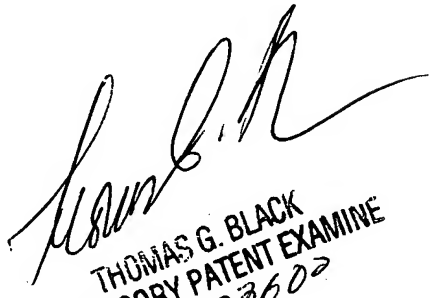
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marie A. Weiskopf whose telephone number is (571) 272-6288. The examiner can normally be reached on Monday-Thursday between 7:00 AM and 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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